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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/530,646

01/11/2006

David Winn

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EXAMINER

HEARD, THOMAS SWEENEY

ART UNIT

PAPER NUMBER

1654

MAIL DATE

DELIVERY MODE

08/18/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/530,646	Applicant(s) WINN, DAVID	
	Examiner THOMAS S. HEARD	Art Unit 1654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-30 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22-30 is/are allowed.
- 6) ☐ Claim(s) 20 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>07/27/2010</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The Applicants Amendments to the claims received on 6/14/2010 is acknowledged. The text of those sections of Title 35 U.S. Code not included in the action can be found in the prior office action. Rejections or objections not addressed in this office action with respect to the previous office action mailed 3/24/2010 are hereby withdrawn.

Claim(s) 20-30 are pending. Applicants have amended claim(s) 20. Claims 20-30 are hereby examined on the merits.

The species of Claims 23-30 appear free of the prior art and do not depend on a rejected claim. Claims 23-30 are allowable.

The current examination is under election of species practice. Upon receipt of the amended claims, a new search was extended to the newly amended genus to which in the course of searching the prior art a compound was found readable on Claims 20 as set forth below. Further, the newly submitted IDS contain art readable on the currently amended claims and this art has also been applied to Claim 20 as set forth below.

Previous Office Action Rejections

Claim Rejections - 35 USC § 102

Applicants have amended Claim 20, narrowing the scope of the definition for RG. The current claims require $\text{--C=O-CH}_2\text{--LG}$ for RG which was not contained in the

species found in the prior art. Therefore, the rejection over Claim 20 and 21 are withdrawn

New Ground of Rejection

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 20 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claim 20, Applicants have introduced a the amino acid of proline as one of the substituents for R₁ and R₂. However, proline is not a side chain of an amino acid, indicated by the other substituents for R₁ and R₂. It is unclear and indefinite as to how this amino acid is to be incorporated into the structure of Claim 20 as the substituent for R₁ or R₂. The structure is drawn has not indication as to how it is linked to the parent molecule. Because the dependent claim does not correct the issue at hand, it is indefinite and is rejected under 35 U.S.C. 112 second paragraph.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

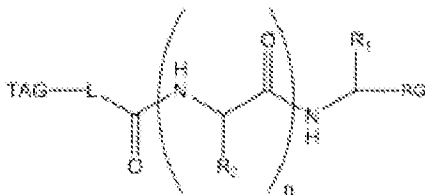
A person shall be entitled to a patent unless –

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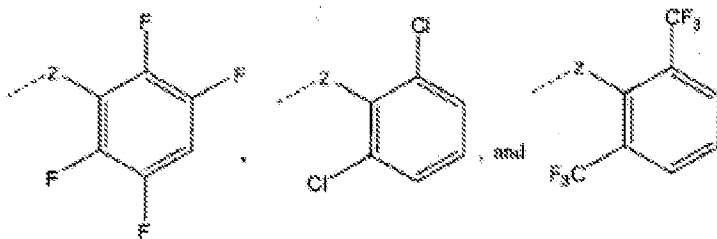
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 20 is rejected under 35 U.S.C. 102(e) as being anticipated by Krantz A, et al, "Peptidyl (acyloxy)methyl ketones and the quiescent affinity label concept: the departing group as a variable structural element in the design of inactivators of cysteine proteinases,".Biochemistry. 1991 May 14;30(19):4678-4687, and US 2002/0086333 for the sole purpose of defining phenylalanine as a fluorescent tag.

The instant invention is drawn to compounds of the following formula:



where $n = 0$ to 4, the TAG is a fluorescent moiety, among other labels, and RG is $-(C=O)-CH_2-LG$, and where the LG is



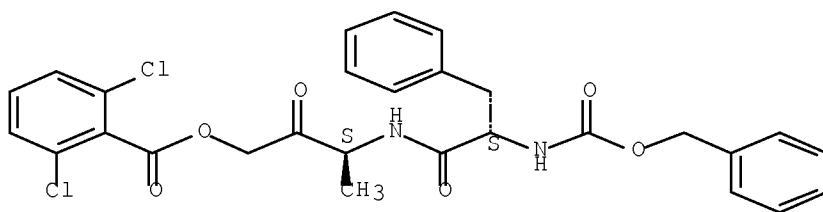
wherein Z is $-O-$ or $-O-C(=O)-$;

and L is

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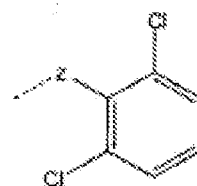
L is optionally present and is an alkyl or heteroalkyl group of 1-20 backbone atoms selected from the group consisting of: -N(R)-, -O-, -S- or -C(R)(R)-, where each R is independently H or a -C₁₋₆ alkyl straight, or branched chain.

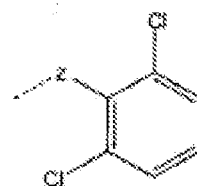
Krantz A, et al, discloses the following compound:



also known as 2,6-dichloro-, (3S)-2-oxo-3-[[[(2S)-1-oxo-3-phenyl-2-

[[[(phenylmethoxy)carbonyl]amino]propyl]amino]butyl ester Benzoic acid, under RN 115186-04-4 in CAPLUS.



In the instant case, RG is -(C=O)-CH₂-LG, and LG is  where Z is -C(=O)-O-, and R₁ is methyl (-CH₃), n = 0, and L is absent, and the remaining structure is a TAG comprising the amino acid Phenylalanine, see Table 1. US 2002/0086333 discloses that phenylalanine, tryptophan, and tyrosine are fluorescent amino acids, and

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given that the compound taught by Krantz et al contains the amino acid phenylalanine, the compound would have a fluorescent TAG. Further, given that the specification does not provide a limiting definition for a fluorescent moiety, the art as applied is applicable to instant invention and definition for fluorescent moiety. Therefore the invention, as claimed is anticipated by the prior art.

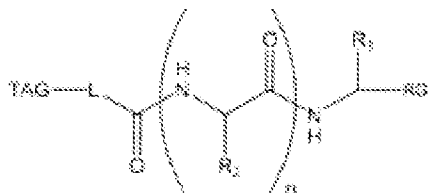
The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

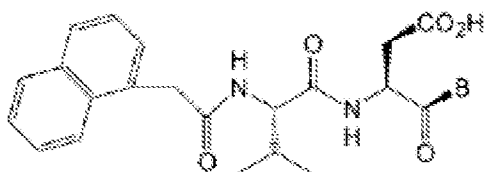
Claim 20 is rejected under 35 U.S.C. 102(e) as being anticipated by WO 2003/072528 and Aladekomo, J. B. et al, "Excimer' Fluorescence. VII. Spectral Studies of Naphthalene and Its Derivatives." Sciences, Vol. 284, No. 1399 (Mar. 23, 1965), pp. 551-565, source being Proceedings of the Royal Society of London. Series A, Mathematical and Physical. The Aladekomo, et al reference is used solely to disclose the fluorescent property of naphthalene.

The instant invention is drawn to compounds of



as described supra.

The WO document discloses the following compound contained in Table 3, that



of , compound 47, where B is CH₂OCO(2,6-diCl-Ph). R₁ is -H₂-(C=O)-OH, and R₂ is -CH(CH₃)₂, L is alkyl (-CH₂-), and TAG is naphthalene. Aladekomo et al discloses naphthalene as a fluorescent moiety and would be a TAG as instantly claimed given the absence of a limiting definition for TAG in the specification. Therefore, the invention is anticipated by the prior art as instantly claimed.

Conclusion

Claims 23-30 are allowed. No other claims are allowed.

Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on 7/27/2010 prompted the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 609.04(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Prior art contained in the reference of record can be applied in the next office action.

Applicant should specifically point out the support for any amendments made to the disclosure, including the claims (MPEP 714.02 and 2163.06). Due to the procedure outlined in MPEP § 2163.06 for interpreting claims, it is noted that other art may be applicable under 35 U.S.C. § 102 or 35 U.S.C. § 103(a) once the aforementioned issue(s) is/are addressed.

Applicant is requested to provide a list of all copending applications that set forth similar subject matter to the present claims. A copy of such copending claims is requested in response to this Office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Thomas S. Heard** whose telephone number is **(571) 272-2064**. The examiner can normally be reached on 9:00 a.m. to 6:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cecilia Tsang can be reached on (571) 272-0562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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